

The evolution of modal choice among motorised professionally active people in 3 Swiss cities 1994-2011



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Sébastien Munafò
Emmanuel Ravalet
Derek Christie
Stéphanie- Vincent-Geslin
Vincent Kaufmann
EPFL-TRACE- LASUR



Plan

1. Introduction

- a) Questioning modal choices
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2. Key results

- a) Positive representations of modes of transport
- b) Varied uses of modes of transport
- c) Different types of users and their evolution between 1994 and 2011

3. Conclusions

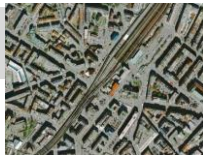
- a) Macro sociological teachings : the emergence of multimodal lifestyles in urban Switzerland
- b) Operational teachings : 3 different models of modal shifts

1. Introduction

a) Questioning modal choice

- > Individual's modal choice can't be explained by cost and time reduction alone.
- > People choose their mode of transport on the basis of much more complex and mixed rationalities which include habits, representations and appropriation of the supply they have at their disposal.
- > Our goals : to **identify different types** of users according to their representations and uses of different transport modes and **observe their evolution** between **1994** and **2011**.

Geneva



Dense, historically car-oriented

Lausanne



A regional centre undergoing metropolisation

Bern



The benchmark

1. Introduction

b) Methodology

- > Our study is based on the results of telephone surveys conducted in 1994 and in 2011 among a specific population :
 - **Urban** : residing in the centre or direct city suburbs of the 3 selected urban area ;
 - **Professionally active** ;
 - In a theoretical **position of modal choice** :
 - The household owns a car ;
 - It resides in urban area well serviced by public transportation.
 - 1994 : **1'500** and 2011 : **2'198** surveyed

- > The identical methodology used in 1994 and 2011 has allowed us to identify significant evolutions in these 3 Cities.

2. Key results

a) Positive representations of modes of transport

- > Regarding the image, our data indicates that the perceptions of car is remained very positive.
- > However the global percentage of positive perceptions has significantly decreased in Geneva and Lausanne.
- > In 2011, the adjective "polluting" is much more cited than in 1994.

*Changes in the perception of the **car**, in % of adjectives cited*

Geneva				Lausanne				Bern			
1994		2011		1994		2011		1994		2011	
Practical	25%	Practical	23%	Fast	27%	Practical	25%	Practical	25%	Practical	22%
Fast	19%	Fast	11%	Practical	25%	Fast	13%	Fast	19%	Comfortable, easy	13%
Comfortable, easy	14%	Independence	10%	Independence	13%	Independence	10%	Comfortable, easy	14%	Fast	12%
Independence	13%	Comfortable, easy	10%	Comfortable, easy	12%	Polluting	9%	Independence	13%	Independence	10%
Expensive	6%	Polluting	9%	Expensive	6%	Comfortable, easy	9%	Expensive	6%	Expensive	8%

2. Key results

a) Positive representations of modes of transport

- > On the contrary, we observe an important improvement of the representations concerning public transportation.
- > The increase of the positive rating is particularly well observed in Lausanne (metro-effect).
- > They are less often described as slow, uncomfortable and more as fast or environmentally-friendly.

*Changes in the perception of **public transportation**, in % of adjectives cited*

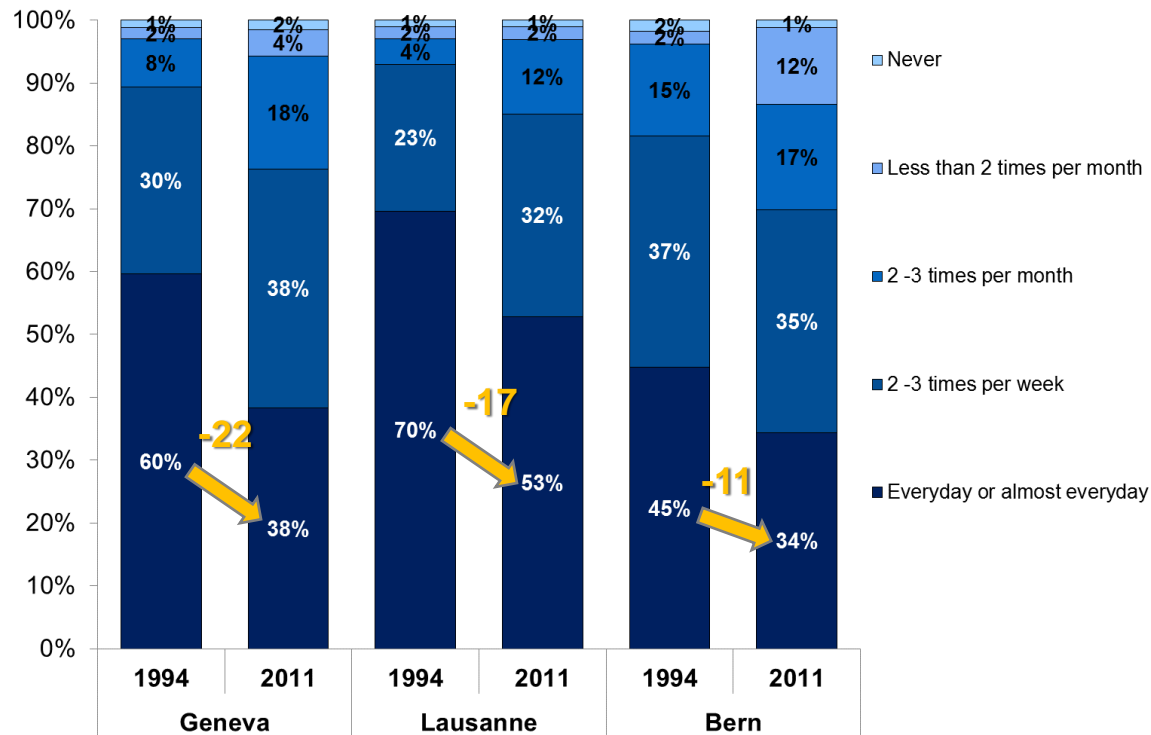
Geneva				Lausanne				Bern			
1994		2011		1994		2011		1994		2011	
Practical	17%	Practical	17%	Restrictive	17%	Practical	19%	Practical	17%	Practical	17%
Restrictive	15%	Uncomfortable, unpleasant	12%	Slow	15%	Environmentally-friendly	11%	Environmentally-friendly	14%	Comfortable, easy	11%
Slow	15%	Expensive	9%	Practical	14%	Expensive	9%	Restrictive	12%	Environmentally-friendly	10%
Uncomfortable, unpleasant	11%	Environmentally-friendly	8%	Expensive	11%	Uncomfortable, unpleasant	8%	Expensive	11%	Safe, reliable	7%
Expensive	9%	Fast	7%	Uncomfortable, unpleasant	10%	Fast	6%	Slow	9%	Fast	6%

2. Key results

b) Varied uses of modes of transport

- > Important changes concern not only representation but also the mobility behaviour of our sample.
- > The car still holds a very important position. However, its frequency of use clearly decreased between 1994 and 2011.

*Change in the frequency of **car** use among drivers in Geneva, Lausanne and Bern, in % of respondents.*

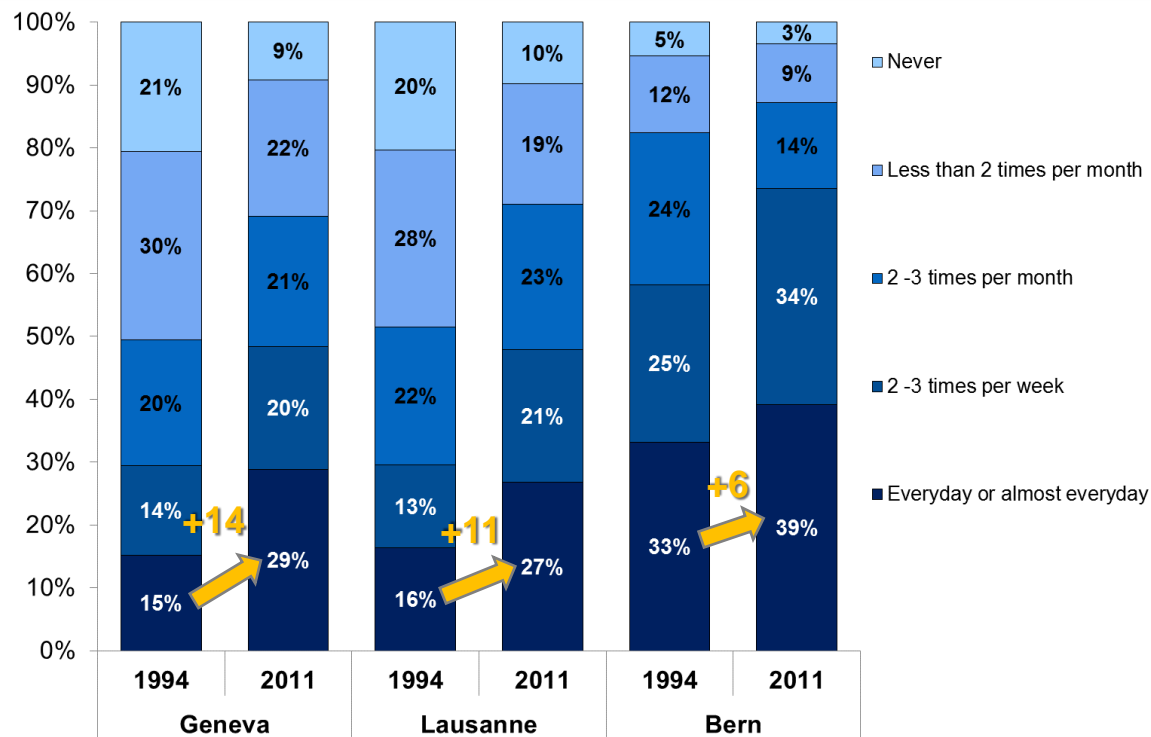


2. Key results

b) Varied uses of modes of transport

- > In parallel, our data shows an increased use of public transportation.
- > Only a very small minority of our sample claims never using them in 2011.

Changes in the frequency of use of **urban public transportation** in Geneva, Lausanne and Bern, in %



2. Key results

c) Different types of users and their evolution

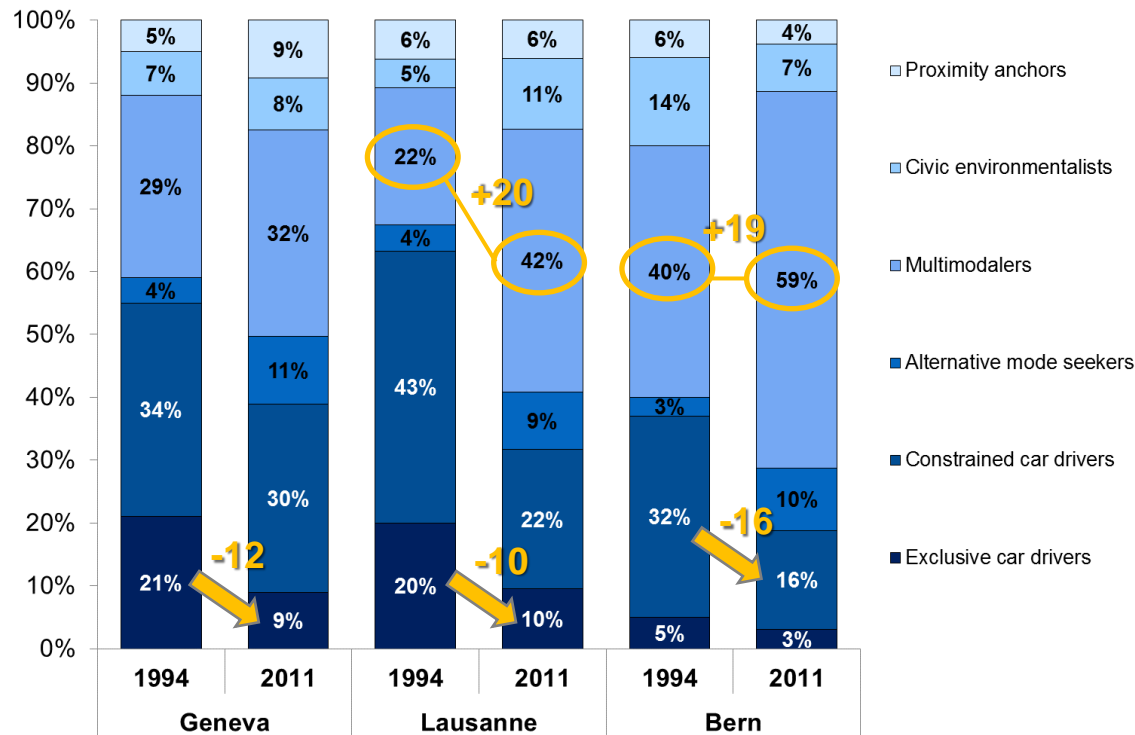
- > By comparing our finding on the perceptions and those concerning actual modal practices, we were able to categorise the respondents into **6 main types of users**, corresponding to the main logics of action underlying modal choice.
- 1) **Exclusive car drivers**, *who travel only by car, whose activities and schedules are structured around the accessibility offered by this mode of transportation.*
 - 2) **Constrained car drivers**, *who are forced to use others modes of transportation for certain destinations, usually due to parking and/or traffic conditions.*
 - 3) **Alternative mode seekers**, *who prefer other modes than the car because of their convenience.*
 - 4) **Civic environmentalists**, *who prefer other modes than the car because of their personal convictions.*
 - 5) **Multimodalers**, *who choose their transport mode based on its effectiveness. Depending on the reason for the trip, the time of day, the destination and other constraints, they can just as easily drive as take the train, walk or cycle.*
 - 6) **Proximity anchors**, *who prefer not to commute at all.*

2. Key results

c) Different types of users and their evolution

- > In 2011, logics of action based on car use were far less present in all three cities, while “**multimodalers**” accounted for a large proportion of respondents.
- > Most impressive decrease in Geneva and Lausanne (-12 and -10 points of percentage).

Change in the distribution of respondents based on modal choice logic, in %



3. Conclusion

a) Macro sociological teachings : the emergence of multimodal lifestyles in urban Switzerland

- > A **major shift in values and opinions** applied to transport modes which is related to an increasing focus on sustainability and quality of life in urban contexts over the past 15-20 years.
- > **An important shift in modal practices.** While car use remains frequent, the concept of using it systematically for all kind of trips has drastically decreased.
- > These results give indications about emerging lifestyles in Swiss cities. **Multimodality now appears to be a significant urban trend.**
- > **Public policies have had major impact** on modal shift by accompanying and stimulating the trend concerning values and opinions !



3. Conclusion

b) Operational teachings : 3 different models of modal shifts

- > Based on the contrasting profiles of the 3 cities in our results, **3 major models** of modal shift can be underlined :

a) **Genevan model > Modal shift by saturation/by constraints**

Main levers at work : Reduced parking supply, traffic jam (30% of constrained car drivers)

b) **Lausanne model > Modal shift based by seduction and image**

Main levers at work : Qualitative leap in public transportation supply, branding, urban spaces quality and design

b) **Bern model > Modal shift by coherence and long term coordination**

Main levers at work : Planning and coordination at the regional scale, good railway supply, reduced parking supply, urban spaces quality and design (> almost no exclusive car drivers)

Thank you for your attention

sebastien.munafo@epfl.ch